

Experiment Explanation:

This experiment consists of a low power radar unit with TPO of no more than 3 Watts. It will be mounted on the side of a building pointing away from the building. It will be staring into mountainsides away from Sundance Resort. It will have a near range to target of 500m with a far range not exceeding 2km.

The radar is owned by the Utah Department of Transportation and is solely for government use. It will be used for snow pack classification, avalanche forecasting and avalanche detection. The final intent is to mitigate the dangers involved in avalanche prediction and most snow sports. Niivatech, Inc. will operate the radar and monitor the data.

The radar model has been tested for UAS use and has shown no interference to other entities broadcasting in this frequency band. It has been tested for UAS use, but in this application, the radar will be very fixed and pointed directly at the mountain. UDOT's use of the radar in low power mode and pointing at the mountain shows it will continue to operate without interfering other frequency broadcasters.